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State of New Mexico ENVIRONMENT DEPARTMENT

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Return Receipt Requested

OPERATING PERMIT NO: P085R1 Tempo/IDEA ID No.: 141-PRT20050001

AIRS No. 35-013-0021

FACILITY NAME: White Sands Missile Range

FACILITY OWNER/OPERATOR: United States Army

PERMITTEE: U.S. Army, White Sands Missile Range

White Sands Missile Range, NM

RESPONSIBLE COMPANY OFFICIAL: Thomas A. Ladd

Director, Public Works, White Sands Missile Range

ISSUED BY: New Mexico Environment Department

Mary Uhl

Bureau Chief

Air Quality Bureau

AUG 18 2006

Date of Issuance

INTRODUCTION

Operating Permit Number P085R1 is issued by the Air Quality Bureau of the New Mexico Environment Department ("Department") to White Sands Missile Range (White Sands) pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits. This permit authorizes the operation of this facility located in south-central New Mexico, with its main cantonment area at the eastern base of the Organ Mountains at UTM Zone 13, UTMH 359.95 km, UTMV 3584.23 km (approximate coordinates of Post Headquarters – Building 100), approximately 15 miles east northeast of Las Cruces, New Mexico in Doña Ana County. The main cantonment area is near the southwest corner of the Range, which extends approximately 35 miles east west and 100 miles north south and covers an area of approximately 2.2 million acres in Doña Ana, Otero,

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Sierra, Socorro, and Lincoln Counties. In addition, there is a call-up area of approximately 1,600 square miles is located to the north of the Range in Socorro and Torrance Counties and there is a call-up area of 1,022 square miles to the west of the Range in Doña Ana, Socorro, and Sierra Counties.

This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.

This facility is a military installation and its primary mission is to test and evaluate objects for the military and private industry. The major processes associated with the facility are as follows: mission support activities, such as painting, abrasive cleaning, and woodworking operations to prepare material for testing and evaluation and to maintain equipment and facilities at various locations. Miscellaneous chemical use throughout the Range results in emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). Many of the operations are conducted at remote locations where no electricity is available and therefore, White Sands has numerous portable generators. Other emission sources include boilers to supply building heat, and unleaded gasoline operations including storage tanks and distribution systems.

The term of this permit is five (5) years. It will expire five years from the date of issuance, pursuant to 20.2.70.302.B NMAC. Application for renewal of this permit is due twelve (12) months prior to the date of expiration, pursuant to 20.2.70.300.B.2 NMAC.

Pursuant to 20.2.70.302.A.1 NMAC, the Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued.

Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department.

Pursuant to 20.2.70.302.A.5 NMAC, all terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the federal Act.

PERMIT SHIELD

Pursuant to 20.2.70.302.J NMAC, compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table A.1 of Appendix A. The requirements in Table A.1 are applicable to this facility with specific requirements identified for individual emission units.

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The Department has determined that the requirements in Table A.2 of Appendix A as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.

This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under Section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.

TOTAL POTENTIAL EMISSIONS

The total potential emissions from this facility, excluding insignificant or trivial activities, are shown in the following table. Emission limitations for individual units are shown in section 3.2.

Table 1, Total Potential Criteria Pollutant Emissions from Entire Facility (for information

only, not an enforceable condition):

Pollutant	Emissions (tpy)
Nitrogen Oxides (NOx)	542.4
Carbon Monoxide (CO)	153.2
Volatile Organic Compounds (VOCs)	99.5
Sulfur Dioxide (SO ₂)	36.7
Total Suspended Particulate (TSP)	186.6
Particulate Matter Less Than 10 Microns (PM10)	50.5
Particulate Matter Less Than 2.5 Microns (PM2.5)	49.6

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Table 2, Total Potential HAPS that exceed one ton per year (for information only, not an enforceable condition):

Pollutant	Emissions (tons per year)
Chlorine	1.7
Ethylene glycol	6.0
	1.25
Hydrogen Fluoride/Deuterium Fluoride (HF/DF)	
Methyl-tert-butyl-ether (MTBE)	6.0
Naptha	3.5

^{*} HAP Emissions are already included in VOC emissions

PERMIT TERMS AND CONDITIONS

1.0 GENERAL CONDITIONS

- 1.1 The following permit terms and conditions are placed upon the permittee in accordance with 20.2.70.301.B NMAC and 20.2.70.302.A.2 NMAC.
- 1.1.1 The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act.
- 1.1.2 It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 1.1.3 If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC.
- 1.1.4 The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee.

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1.1.5 A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit.

- 1.1.6 This permit does not convey property rights of any sort, or any exclusive privilege.
- 1.1.7 In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA.
- 1.2 The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. This condition is pursuant to 20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2.
- 1.3 If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. This condition is pursuant to 20.2.70.302.A.1.d NMAC.
- 1.4 The permittee shall pay fees to the Department consistent with the fee schedule in 20.2.71 NMAC <u>Operating Permit Emission Fees</u>. The fees will be assessed and invoiced separately from this permit. This condition is pursuant to 20.2.70.302.A.1.e NMAC.
- 1.5 A responsible official (as defined in 20.2.70 NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. This condition is pursuant to 20.2.70.300.E NMAC.
- 1.6 Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. This condition is pursuant to 20.2.70.201.B NMAC.
- 1.7 The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. This condition is pursuant to 20.2.73 NMAC and 20.2.70.302.A.1 NMAC.
- 1.8 The source will continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the source will meet such requirements on a timely basis. This condition is pursuant to sections 300.D.11.c and 302.G.3 of 20.2.70 NMAC.

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2.0 FACILITY INFORMATION

The following conditions are placed upon the permittee pursuant to 20.2.70.302.A.7 NMAC.

2.1 Regulated Equipment

All the regulated equipment for each source type is listed in Section 4.0.

2.2 Air Pollution Control Equipment

All the pollution control equipment required for this facility is listed in each sub-section of Section 4.0 below. Each emission point is identified by the same number that was assigned to it in the permit application:

3.0 GENERAL FACILITY REQUIREMENTS FOR ALL EMISSION UNITS IN ALL SOURCE CATEGORIES

General information regarding facility wide requirements is provided below.

3.1 Applicable Requirements

All applicable requirements for this facility are discussed in each sub-section of Section 4.0 and listed in Appendix A, Table A.1. This condition is pursuant to 20.2.70.302.A.1 NMAC.

3.2 General Monitoring Requirements

The conditions of Section 3.2 are pursuant to 20.2.70.302.C NMAC.

- 3.2.1 The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- 3.2.2 If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating

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Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

- 3.2.3 The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated as follows:
- 3.2.3.1 If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
- 3.2.3.2 If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
- 3.2.3.3 A minimum of one of each type of monitoring activity shall be conducted during the five-year term of this permit.
- 3.2.3.4 The permittee is not required to report a deviation for any monitoring or testing that is consistent with the monitoring requirements and permit conditions.
- 3.2.3.5 For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% load cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report that is required to be furnished to the Department.
- 3.2.3.6 When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be reimposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- 3.2.3.7 Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any pre-existing monitoring requirements shall continue to be in force from the date of permit issuance.
- 3.2.3.8 Startup, Shutdown and Malfunction Conditions: For operations and equipment subject to 40CFR60, excess emissions, or operations under startup, shutdown, or malfunction shall be addressed in accordance with the requirements of 40CFR60.7(c) or 40CFR60.8(c), as

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appropriate. This facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40CFR63.6(e)(3). This condition is pursuant to 20.2.70.302.A.1 NMAC.

- 3.3 General Recordkeeping Requirements Conditions of 3.3 are pursuant to 20.2.70.302.D NMAC.
- 3.3.1 All sampling and measured data required by this permit for the emissions units in this facility shall be recorded. The minimum information to be included in these records is:
- 3.3.1.1 equipment identification (include make, model and serial number for all tested equipment and emission controls),
- 3.3.1.2 date, and time of sampling or measurements,
- 3.3.1.3 date analyses were performed,
- 3.3.1.4 the company or entity that performed the analyses,
- 3.3.1.5 analytical or test methods used,
- 3.3.1.6 results of analyses or tests,
- 3.3.1.7 operating conditions existing at the time of sampling or measurement.
- 3.3.2 The permittee shall keep copies of all monitoring and measurement data, equipment calibration and maintenance records, Data Acquisition and Handling System (DAHS) if used, other supporting information, and reports required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall show clearly to which emissions unit and/or piece of monitoring equipment it applies, and the date the data was gathered. This condition is pursuant to 20.2.70.302.D.2 NMAC.
- 3.3.3 The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. This condition is pursuant to 20.2.70.302.I.2 NMAC.
- 3.4 General Reporting Requirements Conditions of 3.4 are pursuant to 20.2.70.302.E NMAC.
- 3.4.1 Reports shall clearly identify the subject equipment showing the emission unit ID number according to the operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the required reports. Reports of all required monitoring activities for this facility shall be submitted to the Department on the following schedule. This condition is pursuant to 20.2.70.302.E.1 NMAC.

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Table 3.4.1, Schedule of Monitoring Activity Report Submittal:

Semi-Annual Emissions Monitoring Report	Reporting Period	Submittal Date
All Emission Units in All	January Through June	No Later Than August 15 th
Source Categories at White Sands	July Through December	No Later Than February 15 th

- 3.4.2 The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the discovery of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the discovery of the occurrence, written notice shall be submitted to the Department using the Department's Excess Emissions Form currently in use at time of discovery. This condition is pursuant to 20.2.70.302.E.2 NMAC.
- 3.4.3 White Sands shall submit semi-annual emissions monitoring reports that include emissions from all permitted sources on the range. For each emission unit identified in Section 4.0 of this permit, the emissions report shall identify the allowable and the actual emissions of the criteria pollutants NOx, CO, SO2, PM, and VOCs.
- 3.4.4 For each emission unit in Section 4.0 of this permit the emissions report shall identify and sum the actual emissions of hazardous air pollutants (HAPs) and compare them with the facility-wide allowable emission limit of 9.9 tons per year for each individual HAP and 24.9 tons per year for all combined HAPs as specified in the Introduction of this permit.
- 3.4.5 The reporting requirements in Section 4.0 are pursuant to 20.2.70.302.E NMAC.

3.5 Facility Emission Limits

The permittee shall not exceed allowable emission limits of 9.9 tpy for individual HAPs and 24.9 tpy for all combined HAPs.

- 3.5.1 Source Type Emission Limits: The emission limits in each sub-section of Section 4.0 are pursuant to 40CFR50, and paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC.
- 3.6 <u>Source Type Operational Requirements</u>: The operational requirements in each sub-section of Section 4.0 are pursuant to Paragraphs 1, 7 and 8 of 20.2.70.302.A NMAC.

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4.0 REQUIREMENTS FOR INDIVIDUAL EMISSION UNITS FROM EACH SOURCE TYPE

4.1 ABRASIVE BLASTING (UNENCLOSED)

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Make/Model	Serial #	Type of Control	Blasting Medium
200	HELSTF/ 26500	Schmidt/6.5	K2065	None	Sand
310	LBTS	ALC Sandy Jet/40007	167215	None	Sand
900	SMR/ 27186	Schmidt/6.5	Schmidt/6.5 K1658 None		Sand
1100	Main Post/ 1538	Lindsay/300	27001	None	Sand
1201	Main Post/ N100E	A/DEC/PBM24-R	1466	None	Sand
1600	GEODDS	Central Pneumatic/NA	1440	None	Sand
1610	RATSCAT/ 7000	California/NA	17087	None	Sand
1700	Various	Rental	Not Availabl e	None	Sand

4.1.1 Applicable Requirements

None

4.1.2 Emissions Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	$PM_{2.5}$	
Abrasive Blasting (Unenclosed)	6.20	0.88	0.09	

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4.1.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)
Unenclosed Abrasive Blasting	Abrasive Material Used	68.0

4.1.4 Emissions Monitoring Requirements

- 4.1.4.1 White Sands shall monitor the amount of abrasive material used for all unenclosed abrasive blasting operations.
- 4.1.4.2 White Sands shall calculate abrasive blasting emissions based on the amount of abrasive material used and the emission factors and calculation methods approved by the Department.

4.1.5 Record Keeping

White Sands shall maintain records of the amount of abrasive material used for all unenclosed abrasive blasting operations.

4.1.6 Reporting

White Sands shall report abrasive-blasting emissions to the Air Quality Bureau (AQB) semi-annually.

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4.2 AGGREGATE PROCESSING

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Equipment Type	Make/Model	Serial #	System Capacity (tons/hour)
816	Portable	Contractor Owned/Operated Rock Crusher and Associated Systems	Not Available	Not Available	Not Available
832	Portable	WSMR Owned/Operated Rock Crusher and Associated Systems	Telsmith/ 24JGCC	505M2518	75.0

4.2.1 Applicable Requirements

White Sands shall specify, as a contract term, that any aggregate processing equipment operated on the Range must demonstrate compliance with any applicable air quality regulation including NSPS.

4.2.2 Emissions Limits

Source		Allowable Emissions (tpy)		
Source	TSP	PM_{10}	$PM_{2.5}$	
Aggregate Processing	11.80	4.30	4.30	

4.2.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)
Aggregate Processing	Total Aggregate Produced	600,000

4.2.4 Emissions Monitoring Requirements

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- 4.2.4.1 White Sands shall monitor the quantity (in tons per year) of aggregate materials produced on the Range.
- 4.2.4.2 White Sands shall calculate aggregate emissions based on the amount of rock crushed using emission factors and calculation methods approved by the Department.
- 4.2.5 Record Keeping
- 4.2.5.1 White Sands shall maintain records of the quantity (in tons per year) of aggregate materials produced from the portable crushers.
- 4.2.5.2 White Sands shall specify, as a contract term, that any aggregate processing equipment operated on the Range must demonstrate compliance with any applicable air quality regulation, including NSPS.

4.2.6 Reporting

White Sands shall report aggregate-processing emissions to the AQB semi-annually.

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4.3 **ASPHALT PRODUCTION**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Equipment Type	Make/ Model	Serial #	Design Capacity/ Typical Production (tons/hour)
819	Portable	Contractor Owned/Operated Hot Mix Asphalt Production Equipment	Not Available	Not Available	30-1,000
820	Portable	Contractor Owned/Operated Hot Mix Asphalt Production Equipment	Not Available	Not Available	30-1,000

4.3.1 Applicable Requirements

White Sands shall specify, as a contract term, that any asphalt production equipment operated on the Range must certify compliance with any applicable air quality regulation, including NSPS.

4.3.2 Emission Limits

Source		Allowable Emissions (tpy)					
Source	NOx	CO	SO ₂	TSP	PM_{10}	PM _{2.5}	VOC
Asphalt Productio n	15.0	50.0	11.0	5.25	3.38	3.38	1.03

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPs combined and 9.9 tpy for individual HAPs.

4.3.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)
Asphalt Production	Total Asphalt Produced	250,000

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4.3.4 Emissions Monitoring Requirements

- 4.3.4.1 White Sands shall monitor the quantity (in tons per year) of asphalt produced on the Range from each asphalt production operation.
- 4.3.4.2 White Sands shall specify, as a contract term, that any asphalt production equipment operated on the Range must certify compliance with any applicable air quality regulation, including NSPS.
- 4.3.4.3 White Sands shall calculate asphalt emissions based on the amount of hot mix asphalt produced using emission factors and calculation methods approved by the AQB.
- 4.3.5 Record Keeping
- 4.3.5.1 White Sands shall maintain records of all contracted asphalt processing equipment including Air Quality Permit numbers and relocation notices.
- 4.3.5.2 White Sands shall maintain records of the amount of hot mix asphalt produced at each asphalt production operation.

4.3.6 Reporting

White Sands shall report asphalt-processing emissions to the AQB semi-annually.

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4.4 **CONCRETE PRODUCTION**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emissio n Unit No.	Location/ Building #	Equipment Type	Make/Mode l	Serial #	Design Capacity/ Typical Production (tons/hour)
		WSMR	Vince		
404	PHETS	Owned/Operated Concrete Batch Plant	Hagen/ 550- 10	930907	400
406	PHETS	WSMR Owned/Operated Concrete Batch Plant	Ross/SH7	6915	120
410	Capitol Peak WSMR Owned/Operated Concrete Batch Plant		Vince Hagen/HS- 12300A	Not Available	40
843	Contractor		Not Available	Not Available	120

4.4.1 Applicable Requirements

White Sands shall specify, as a contract term, that any concrete batch plant operated on the Range must certify compliance with any applicable air quality regulation, including NSPS Subpart I.

4.4.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	PM _{2.5}	
Concrete Production	5.3	1.8	1.8	

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4.4.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)	
Concrete Production	Total Concrete Produced	100,000	

4.4.4 Emissions Monitoring Requirements

- 4.4.4.1 White Sands shall monitor the quantity (in tons per year) of concrete produced at each concrete batch plant on the Range.
- 4.4.4.2 White Sands shall require operators (including contractors) of concrete production operations to shut down any equipment if there is an indication that it is malfunctioning and that malfunction could increase air pollutant emissions.
- 4.4.4.3 White Sands shall calculate concrete emissions based on the amount of concrete produced using emission factors and calculation methods approved by the AQB.

4.4.5 Record Keeping

- 4.4.5.1 White Sands shall maintain records of all contracted concrete processing equipment, including Air Quality Permit numbers and relocation notices.
- 4.4.5.2 White Sands shall maintain records of the amount of concrete produced at each concrete batch production operation.

4.4.6 Reporting

White Sands shall report concrete-processing emissions to the AQB semi-annually.

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4.5 DATA DISINTEGRATOR

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emissio n Unit No.	Location/ Building #	Equipment Type	Make/Mode l	Serial #	Design Capacity/Typical Production (lbs/hour)
1800	Main Post/ 1858	Data Disintegrator	SEM/1424	28448	100

4.5.1 Applicable Requirements

None

4.5.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	$PM_{2.5}$	
Data Disintegrator	0.31	0.31	0.31	

4.5.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)	
Data Disintegrator	Total Data Throughput	9,600	

4.5.4 Emissions Monitoring

- 4.5.4.1 White Sands shall monitor the amount of data (paper) shredded in the data disintegrator.
- 4.5.4.2 White Sands shall maintain the collection system according to manufacturer's specifications to ensure the collection device is operating correctly.
- 4.5.4.3 White Sands shall calculate emissions from the data disintegrator based on the amount of

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data/paper fed through the system and the control efficiency of the control device using the equation and assumptions described in the permit application.

4.5.5 Record Keeping

White Sands shall maintain records of the amount of data/paper throughput for the disintegrator.

4.5.6 Reporting

White Sands shall report emissions from the data disintegrator to the AQB semi-annually.

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4.6 **DUST GENERATOR**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emissio n Unit No.	Location/ Building #	Equipment Type	Make/Mode l	Serial #	Design Capacity/Typical Production (tons/year)
1900	Portable	Unenclosed Dust Generator	Custom Built	Not Available	1.5

4.6.1 Applicable Requirements

None

4.6.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	PM _{2.5}	
Unenclosed Dust Generation	1.5	0.75	0.75	

4.6.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)	
Unenclosed Dust Generation	Total Dust Throughput	1.5	

4.6.4 Emissions Monitoring Requirements

- 4.6.4.1 White Sands shall monitor the quantity of material fed through the unenclosed dust generator.
- 4.6.4.2 White Sands shall calculate emissions from unenclosed dust generators by assuming

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that PM emissions are equal to the amount of dust fed through the generator. PM_{10} and $PM_{2.5}$ emissions are assumed to each be 50% of the TSP emissions.

4.6.5 Record Keeping

White Sands shall maintain records of the total amount of material fed through the dust generator.

4.6.6 Reporting

White Sands shall report dust generator emissions to the AQB semi-annually.

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4.7 **EQUIPMENT LEAKS**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Gasoline System Components
3017	POL Yard – Main Post, Rhodes Canyon, and	Valves, Safety Relief Valves, Flanges, Sampling Connections, Open-Ended
3017	Stallion Range Center	Lines, Pump Seals

4.7.1 Applicable Requirements

None

4.7.2 Emission Limits

Source	Allowable Emissions (tpy) VOC	
Equipment Leaks for Components in Gasoline Service	5.8	

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.7.3 Operational Requirements

White Sands shall maintain an accurate count of the number of equipment components in gasoline service.

- 4.7.4 Emissions Monitoring Requirements
- 4.7.4.1 White Sands shall maintain a visual leak detection and leak repair program for emission points in gasoline service, including fuel dispensers, fuel loading racks, and storage tanks.
- 4.7.4.2 White Sands shall calculate equipment leak VOC and HAP emissions based on the records

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and the published US EPA Protocol for Equipment Leak Emission Estimates.

4.7.5 Record Keeping

White Sands shall maintain records of the number of equipment components in gasoline service.

4.7.6 Reporting

White Sands shall report equipment leak emissions to the AQB semi-annually.

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4.8 **EXTERNAL COMBUSTION**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Fuel Type	Make/Model	Serial #	Heat Input Capacity (10 ⁶ Btu/hour)
202	HELSTF/ 26135	Fuel Oil	Burnham/ 4FW.78.45LB	17466	2.25
203	HELSTF/ 26102	Fuel Oil	Fulton/ FT-0800-C	1203-C	2.25
220	HELSTF/ 1506	Fuel Oil	National/ 52AF	121-4437F	2.37
407	PHETS	Propane	Rite/ WA500WGLL	0027490	3.2
838	Main Post/ WWTF	Natural Gas	Rite/ 150WGG	24387	0.5
844	Main Post/ 1544	Natural Gas	Cleaver Brooks/ CB(LE)150	OL096775	6.12
845	Main Post/ 1544	Natural Gas	Cleaver Brooks/ CB(LE)150	OL096776	6.12

4.8.1 Applicable Requirements

None

4.8.2 Emission Limits

Source	Allowable Emissions (tpy)						
Source	NOx	CO	SO ₂	TSP	PM_{10}	PM _{2.5}	VOC
External Combustion	10.9	9.7	2.3	1.4	1.2	1.1	1.1

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

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4.8.3 Operational Requirements

The fuel consumption of significant external combustion systems, as listed in Section 4.8 of this Permit, shall be limited as follows:

Source	Parameter Limited	Permit Limit
	Natural Gas Burned	$1.09 \times 10^8 \text{ ft}^3/\text{year}$
External Combustion	Fuel Oil Burned	429,866 gal/year
	Propane Burned	306,361 gal/ year

4.8.3.1 Equipment Inspection

The external combustion emission units listed in Section 4.8 shall undergo equipment inspections annually by the method described below.

The permittee shall inspect the overall integrity of the heater's combustion area and air supply system. The permitee shall inspect the gas injection orifices and verify that all passages are unobstructed. Filters and moisture traps shall be in place, clean, and operating effectively to prevent any plugging of gas orifices. The permittee shall look for any burned off or missing burner parts.

4.8.3.2 Operational Inspections

The external combustion emission units listed in Section 4.8 shall undergo annual operational inspections by the method described below.

The permitte shall conduct operational inspections of each external combustion unit listed in Section 4.8 to determine that the unit is operating properly. The operational inspections shall include operational checks for indications of insufficient combustion air, or excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the unit manufacturer, and indications based on operational experience with these units.

4.8.4 Emissions Monitoring Requirements

- 4.8.4.1 White Sands shall monitor and maintain records of actual fuel consumption of the significant external combustion systems in order to fulfill the Emissions Monitoring requirements.
- 4.8.4.2 White Sands shall calculate external combustion system emissions based on the records using equations and commercial boiler emission factors published in AP-42, and/or emission factors provided by the manufacturer.

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4.8.5 Record Keeping

White Sands shall maintain records of all unit inspections required by this Permit and records of any adjustments, repairs or replacements needed to bring the unit into compliance or that affect excess combustion air. Records shall clearly identify the unit; note the units' location within the Range, and the unit ID number according to this Permit.

The permittee shall also follow the record keeping requirements listed in Section 3.0 and shall record any other information the AQB may need to verify the accuracy of monitoring.

4.8.5.1 Equipment Inspections

Records of equipment inspections shall describe the condition of the combustion chamber(s), gas injection orifices, filters, moisture traps and other hardware essential to proper operation of the unit.

4.8.5.2 Operational Inspections

Records of operational inspections shall describe the results of visual observations for insufficient or excessive combustion air in accordance with Section 2.8.3.2. White Sands shall note the type of fuel fired (natural gas, distillate fuel oil, and propane).

- 4.8.5.3 White Sands shall maintain records of the total amount of fuel (natural gas, fuel oil, and propane) consumed in external combustion systems in order to fulfill the Operational Inspections requirements.
- 4.8.5.4 White Sands shall maintain records of the total capacity of significant external combustion systems (i.e., gas fired systems with heat input capacity greater than 5 million Btu/hour and oil fired systems with heat input capacity greater than 1 million Btu/hour).

4.8.6 Reporting

White Sands shall report external combustion emissions based on actual fuel consumption of the significant external combustion systems to the AQB semi-annually.

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4.9 **FUEL DISPENSING**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission	Location/	Type of	System Throughput
Unit No.	Building #	Fuel Dispensed	(10 ⁶ gal/year)
3004	POL Yard – Main Post, Rhodes Canyon, Stallion Range Center, PHETS, LC-32, SMR, HELSTF, and RATSCAT	Unleaded gasoline	1.112

4.9.1 Applicable Requirements

None

4.9.2 Emission Limits

Source	Allowable Emissions (tpy)
Source	VOC
Fuel Dispensing	6.7

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.9.3 Operational Requirements

Source	Parameter Limited	Permit Limit (10 ⁶ gal/year)	
Fuel Dispensing (Unleaded Gasoline)	Total amount dispensed	1.112	

4.9.4 Emissions Monitoring Requirements

4.9.4.1 White Sands shall monitor the total throughput of unleaded fuel dispensing operations.

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4.9.4.2 White Sands shall calculate unleaded fuel-dispensing emissions based on the fuel throughput records and using the equation described in the application or other calculation methods approved by the AQB.

- 4.9.4.3 White Sands shall calculate HAP emissions using the unleaded fuel speciation described in the most current version of EPA's TANKS emissions modeling program.
- 4.9.4.4 Unleaded fuel dispensing emissions of VOCs at White Sands shall not exceed permit limits specified in Section 4.9.2.

4.9.5 Record Keeping

White Sands shall maintain records of the total annual throughput of unleaded fuel dispensing operations.

4.9.6 Reporting

White Sands shall include all unleaded fuel dispensing VOCs and HAPs in the emissions report submitted to the AQB semi-annually.

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4.10 FUEL LOADING RACKS

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Type of Fuel Loaded	System Throughput (10 ⁶ gal/year)	
3010	POL Yard – Main Post, Rhodes Canyon, and Stallion Range	Unleaded Gasoline	1.112	
	Center			

4.10.1 Applicable Requirements

None

4.10.2 Emission Limits

Source	Allowable Emissions (tpy)
Source	VOC
Fuel Loading Racks	2.8

White Sands has accepted rangewide allowable emission limits of 24.9 combined and 9.9 individual HAPs.

4.10.3 Operational Requirements

Source	Parameter Limited	Permit Limit (10 ⁶ gal/year)	
Fuel Loading Racks (Unleaded Gasoline)	Total Amount Loaded	1.112	

4.10.4 Emissions Monitoring Requirements

4.10.4.1 White Sands shall monitor the total unleaded fuel throughput of loading racks.

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4.10.4.2 White Sands shall calculate unleaded fuel loading rack emissions based on the fuel throughput records using the most current version of EPA's TANKS emissions modeling program.

4.10.4.3 White Sands shall calculate HAP emissions using the gasoline speciation described in the most current version of EPA's TANKS storage tank emissions modeling program.

4.10.5 Record Keeping

White Sands shall maintain records of the total annual unleaded fuel throughput of loading racks.

4.10.6 Reporting

White Sands shall include all unleaded fuel loading rack VOCs and HAPs in the emissions report submitted to the AQB semi-annually.

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4.11 **INTERNAL COMBUSTION**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Equipment Type	Make/ Model	Serial #	Energy Size (hp)	Fuel Type
221	Portable	Generator	Friedrichshafen/ V12	24533-002	1,810	Diesel
222	Portable	Generator	Friedrichshafen/ V12	24633-001	1,810	Diesel
223	Portable	Generator	Friedrichshafen/ V12	25541-001	1,810	Diesel
301	LBTS	Generator	CATERPILLAR/ 3516-V16	3EF01312	1,840	Diesel
302	LBTS	Generator	CATERPILLAR/ 3516-V16	3EF01313	1,840	Diesel
303	LBTS	Generator	CATERPILLAR/ 3516-V16	3EF01321	1,840	Diesel
502	Portable	Generator	Libby/ MEP-009B	RZ00578	398	Diesel
503	Portable	Generator	Libby/ MEP-009B	RZ00579	398	Diesel
504	Portable	Generator	Libby/ MEP-009B	RZ00413	398	Diesel
505	Portable	Generator	Libby/ MEP-009B	RZ00426	398	Diesel
506	Portable	Generator	Libby/ MEP-009B	78Z02062	551	Diesel
507	Portable	Generator	Libby/ MEP-009B	78Z02102	551	Diesel
551	Portable	Generator	Libby/	RZ00450	398	Diesel

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			MEP-009B			
552	Portable	Generator	Libby/ MEP-009B	RZ00497	398	Diesel
553	Portable	Generator	Libby/ MEP-009B	RZ00492	398	Diesel
554	Portable	Generator	Libby/ MEP-009B	RZ00502	398	Diesel
555	Portable	Generator	Libby/ MEP-009B	RZ00512	398	Diesel
556	Portable	Generator	Libby/ MEP-009B	RZ00513	398	Diesel
557	Portable	Generator	Libby/ MEP-009B	RZ00536	398	Diesel
558	Portable	Generator	Libby/ MEP-009B	RZ00560	398	Diesel
559	Portable	Generator	Libby/ MEP-009B	RZ00569	398	Diesel
560	Portable	Generator	Libby/ MEP-009B	RZ00575	398	Diesel
821	Portable	Generator	Not Available (Contractor Owned/Operated)	Not Available	770	Diesel
822	Portable	Generator	Not Available (Contractor Owned/Operated)	Not Available	770	Diesel
823	Portable	Generator	Not Available (Contractor Owned/Operated)	Not Available	770	Diesel
824	Portable	Generator	Not Available (Contractor Owned/Operated)	Not Available	770	Diesel
826	Main Post/ 375N	Stationary Pump	CUMMINS/ GTA 885-A	25209132	249	Natural Gas
827	Main Post/ B375S	Stationary Pump	WAUKESHA/ 10432V	150951	671	Propane
828	Main Post/ S-246	Stationary Pump	WAUKESHA/ F11967GU	262049	671	Propane
829	Main Post/ Well #15	Stationary Pump	WAUKESHA/ 145-G-ZB	945084	671	Propane
1601	GEODSS	Generator	CATERPILLAR/ 3406-DI	75700707	385	Diesel

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1603	NASA	Generator	CATERPILLAR/ 3516	25Z06590	1,734	Diesel
1604	NASA	Generator	CATERPILLAR/ 3516	25Z04725	1,734	Diesel
1612	RATSCAT	Generator	CATERPILLAR/ 3512AB TA	TBD	2,172	Diesel
1616	THAAD	Generator	Cummins/ 750DFHA-2412	A020325371 Spec E	1,135	Diesel
1617	THAAD	Generator	Cummins/ 750DFHA-2412	A020323253	1,135	Diesel
1618	THAAD	Generator	Cummins/ 750DFHA-2412	A020323254	1,135	Diesel

4.11.1 Applicable Requirements

None

4.11.2 Emission Limits

Source	Allowable Emissions (tpy)						
Source	NOx	CO	SO ₂	TSP	PM_{10}	PM _{2.5}	VOC
Internal Combustion	516.5	93.5	23.4	20.6	20.6	20.6	25.2

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.11.3 Operational Requirements

Source	Parameter Limited	Permit Limit	
Total Internal Combustion	Total horsepower hours	189,876,540 total hp-hr/year for all permitted units	
Emission Units 221, 222, and 223	Total horsepower hours each	4,072,500 hp-hr/year for each	
Emission Units 301, 302, and 303	Total horsepower hours each	1,564,000 hp-hr/year for each	
Emission Unit 1612	Total horsepower hours	4,126,800 hp-hr/year	

4.11.4 Emissions Monitoring Requirements

4.11.4.1 White Sands shall monitor the hours of operation and the design capacity of each

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internal combustion emission unit listed in Section 4.11.

- 4.11.4.2 White Sands shall monitor the limited hours of operation and design capacity of emission units 221, 222, 223, 301, 302, 303, and 1612.
- 4.11.4.3 White Sands shall calculate internal combustion source emissions using AP-42 and/or manufacturer specified emission factors, and the hours of operation records.

4.11.5 Record Keeping

White Sands shall maintain records of the hours of operation and design power capacity of each significant internal combustion source on the Range.

4.11.5.1 White Sands shall record the limited hours of operation and design power capacity of emission units 221, 222, 223, 301, 302, 303, and 1612.

4.11.6 Reporting

White Sands shall report emissions from internal combustion emission sources listed in Section 4.11 to the AQB semi-annually.

4.11.6.1 White Sands shall report the limited hours of operation and design power capacity of emission units 221, 222, 223, 301, 302, 303, and 1612 to the AQB semi-annually.

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4.12 **LASER EMISSIONS**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Laser Type	Serial #	Maximum Power	Emission Control Equipment
100	Main Post/ 1624	HELIOS- HF/DF	DS15-300H	20 Watts	Molecular Sieve
101	AMRAD/ 25900	HELIOS- HF/DF	SY008	100 Watts	Scrubber Molecular Sieve Scrubber
204	HELSTF/ 26099	MIRACL- HF/DF	Custom Built	Megawatt Class	Sodium Hydroxide Scrubber
216	HELSTF/ 26092	LDD- HF/DF	Custom Built	25 Kilowatts	Potassium Hydroxide Scrubber
217	HELSTF/ 26099	LPCL- HF/DF	Custom Built	100 Watts	Molecular Sieve Scrubber
218	HELSTF/ Limor Site	MTHEL- HF/DF	Custom Built	Classified	None

4.12.1 Applicable Requirements

None

4.12.2 Emission Limits

Source	Allowable Emissions of HAPs Hydrogen Fluoride/Deuterium Fluoride (HF/DF) (tpy)	
Total Laser Emissions	24.9/9.9	

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White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.12.3 Operational Requirements

- 4.12.3.1 White Sands shall not operate laser emission units 100, 101, 204, 216, and 217 without a functioning acid gas control device (i.e., sodium hydroxide scrubber) with a minimum control efficiency of 85%.
- 4.12.3.2 White Sands shall operate laser emission unit 218 without a control device. This unit is a military testing device intended to be used as a weapon in which no control device can be implemented.
- 4.12.4 Emissions Monitoring
- 4.12.4.1 White Sands shall monitor the operating time of each HF/DF laser operated on the Range.
- 4.12.4.2 White Sands shall calculate emissions of HF and DF from the HF/DF lasers. Emissions calculations shall be based on HF/DF production rates and shall account for 85% capture by the acid gas control device on laser emission units 100, 101, 204, 216, and 217.
- 4.12.4.3 Emissions calculations for laser emission unit 218 shall be based on the HF/DF production rate and total lasing time in seconds.

4.12.5 Record Keeping

White Sands shall maintain records of the operating time of each HF/DF laser operated on the Range.

4.12.6 Reporting

White Sands shall report HF/DF emissions from chemical lasers in the facility-wide HAP emissions to the AQB semi-annually.

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4.13 MISCELLANEOUS SOURCES

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.		Location	
3011A		Hazardous Materials Minimization Center (HMMC)	
3011	3011B	Large Blast Thermal Simulator (LBTS)	
3011	3011C	Rocket Stands - 300K and ETA	
	3011D	Rocket Stands - HTA	

4.13.1 Applicable Requirements

None.

4.13.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	$PM_{2.5}$	VOC
3011	32.7	16.4	16.4	19.1

White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.13.3 Operational Requirements

None

4.13.4 Emissions Monitoring Requirements

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- 4.13.4.1 White Sands shall monitor the miscellaneous sources on the Range.
- 4.13.4.2 White Sands shall calculate TSP, PM₁₀, PM_{2.5}, VOC, and HAP emissions associated with the miscellaneous sources. The emission calculations shall account for chemical use and solids, VOC, and HAP contents as documented on Material Safety Data Sheets (MSDS).

4.13.5 Record Keeping

White Sands shall maintain records of the amount of miscellaneous chemicals used by these miscellaneous sources on the Range.

4.13.6 Reporting

White Sands shall include TSP, PM₁₀, PM_{2.5}, VOC, and HAP emissions from non-exempt miscellaneous sources in reports submitted to the AQB semi-annually.

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4.14 **NUCLEAR REACTOR**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Make	Type	Type of Equipment	Type of Emission Control
1300	Nuclear Reactor Site/ 21235	Made by DOE	Fast Burst	Nuclear Reactor	High Efficiency Particulate Air (HEPA) Filters

4.14.1 Applicable Requirements

Operations of the nuclear reactor at White Sands are subject to 40 CFR 61, Subpart I – Radionuclide Emissions from Federal Facilities not Covered by Subpart H (Subpart H addresses DOE facilities).

4.14.2 Emissions Limits

Source	Allowable Emissions (tpy)	
Source	Radionuclide and Iodine	
Nuclear Reactor	Federally Regulated	

4.14.3 Operational Requirements

None

4.14.4 Emissions Monitoring

White Sands shall monitor the operations of the nuclear reactor at White Sands in accordance

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with the provisions of 40 CFR 61, Subpart I – Radionuclide Emissions from Federal Facilities.

4.14.5 Record Keeping

White Sands shall maintain records of the emissions of radionuclides from operations conducted by the Directorate for Survivability, Vulnerability Assessment (SV).

4.14.6 Reporting

White Sands shall report its compliance with the provisions of 40 CFR 61, Subpart I in its report to the AQB semi-annually.

4.15 SURFACE COATING

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Equipment Type	Make	Emission Control
214	HELSTF/ 26040	Paint Booth	Binks	Paper Filters
549	Main Post/ 1784	Paint Booth	Sharp	Paper Filters
702	Main Post/ 426	Paint Booth	Craftsman	Paper Filters
1000	Main Post/ 1550	Paint Booth	Binks	Paper Filters
1205	Main Post/ N100E	Paint Booth	Binks	Paper Filters
1608	RAMS	Paint Booth	Binks	Paper Filters
1614	RATSCAT	Paint Booth	Graco	Paper Filters

4.15.1 Applicable Requirements

None

4.15.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	$PM_{2.5}$	VOC
Surface Coating	0.3	0.3	0.3	8.4

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White Sands has accepted rangewide allowable emission limits of 24.9 combined and 9.9 individual HAPs.

4.15.3 Operational Requirements

Source	Parameter Limited	Permit Limit (gal/year)
Surface Coating (Paint Booths)	Total Paint Used	3,700

4.15.4 Emissions Monitoring

- 4.15.4.1 White Sands shall monitor the amount of paint used for non-exempt surface coating activities on the Range.
- 4.15.4.2 White Sands shall ensure proper maintenance and replacement of paint booth particulate filters according to manufacturer's specifications.
- 4.15.4.3 White Sands shall calculate actual TSP, PM_{10} , $PM_{2.5}$, VOC, and HAP emissions from non-exempt surface coating activities based on the amount and type of paint used, the application equipment employed, and any control device installed on the unit.

4.15.5 Record Keeping

White Sands shall maintain records of the amount of paint used for non-exempt surface coating activities on the Range.

4.15.6 Reporting

White Sands shall include non-exempt surface coating operations emissions in the report submitted to the AQB semi-annually.

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4.16 UNLEADED GASOLINE STORAGE TANKS

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission Unit No.	Location/ Building #	Туре	Capacity (gal)
538	Stallion Range Center/ S-00209	Aboveground	25, 000
539	Main Post/ 1785	Aboveground	25, 000
540	Rhodes Canyon/ 30725	Aboveground	25, 000
541	Main Post/ 1785	Aboveground	25, 000
542	Main Post/ 1785	Aboveground	25, 000

4.16.1 Applicable Requirements

None

4.16.2 Emissions Limits

Source	Allowable Emissions (tpy)	
Source	VOC	
Aboveground Storage Tanks	29.4	

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White Sands has accepted rangewide allowable emission limits of 24.9 tpy for all HAPS combined and 9.9 tpy for individual HAPs.

4.16.3 Operational Requirements

Source	Parameter Limited	Permit Limit (gal/year)
Aboveground Storage Tanks (Unleaded Gasoline)	Total Tank Throughput	1, 618, 195

4.16.4 Emissions Monitoring

- 4.16.4.1 White Sands shall monitor the unleaded gasoline throughput for each storage tank listed in Section 4.16.
- 4.16.4.2 White Sands shall calculate unleaded gasoline storage emissions based on the fuel throughput and using the methodology described in the application.

4.16.5 Record Keeping

White Sands shall maintain records of the unleaded gasoline throughput for each unleaded gasoline storage tank listed in Section 4.16.

4.16.6 Reporting

White Sands shall include VOC and HAP emissions from unleaded gasoline storage tanks (listed in Section 4.16) in the report submitted to the AQB semi-annually.

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4.17 **WOODWORKING**

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant or trivial, and equipment not regulated pursuant to the Act are not included):

Emission	Location/	Make/Model	Serial	Type of
Unit No.	Building #		Number	Emission Control
703	Main Post/ 426	AAF ROTO- CLONE/Type D	D56492	Centrifugal Collector (medium efficiency)

4.17.1 Applicable Requirements

None

4.17.2 Emission Limits

Source	Allowable Emissions (tpy)			
Source	TSP	PM_{10}	$PM_{2.5}$	
Woodworking	1.125	0.56	0.56	

4.17.3 Operational Requirements

Source	Parameter Limited	Permit Limit (tpy)
Woodworking	Total Dust Disposed	7.5

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4.17.4 Emissions Monitoring

- 4.17.4.1 White Sands shall monitor the amount of sawdust collected from the woodworking operation.
- 4.17.4.2 White Sands shall maintain the collection system according the manufacturer's specifications to ensure the collection device is operating correctly.
- 4.17.4.3 White Sands shall calculate emissions from the woodworking operation based on the amount of sawdust collected and the control efficiency of the control device using the equation described in the permit application.

4.17.5 Record Keeping

White Sands shall maintain records of the amount of sawdust collected from the woodworking operation equipped with a dust collection system.

4.17.6 Reporting

White Sands shall report emissions from the woodworking operation to the AQB semi-annually.

- 4.18 When requested by the AQB, the permittee shall provide schedules of testing and monitoring activities.
- 4.19 Unless otherwise identified elsewhere in this permit, all monitoring requirements are effective 120 days after the date of permit issuance.

5.0 COMPLIANCE

5.1 The conditions of Section 6.1 are pursuant to 20.2.70.302.E.3 NMAC. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the current version of the Department's Compliance Certification Report Form (example attached to this permit) and submitted to the Department and to EPA at least every 12 months.

Table 5.1 Annual Compliance Certification Report Submittal:

Submittal Date	
No Later Than February	

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Range	
Range	

- 5.1.1 For sources that have submitted air dispersion modeling that demonstrates compliance with state and federal ambient air quality standards, in accordance with 20.2.70.300.D.10 NMAC or 20.2.72.203.A.4 NMAC, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with state and federal ambient air quality standards (20.2.3NMAC NMAAQS and 40CFR50 NAAQS).
- 5.2 Conditions of 5.2 are pursuant to 20.2.70.302.G.1 NMAC. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following:
- 5.2.1 enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept,
- 5.2.2 have access to and copy, at reasonable times, any records that are required by this permit to be maintained.
- 5.2.3 inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operation regulated or required under the permit,
- 5.2.4 sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.
- 5.3 A copy of this permit shall be kept at the permitted facility and shall be made available to Department personnel for inspection upon request. This condition is pursuant to 20.2.70.302.G.3 NMAC.

6.0 EMERGENCIES

Conditions of 6.0 are pursuant to 20.2.70.304 NMAC.

- 6.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.
- 6.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has

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demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) This facility was at the time being properly operated;
- (c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (d) The permittee fulfilled notification requirements under Condition 5.1.2 of this permit. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 6.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 6.4 This provision is in addition to any emergency or upset provision contained in any applicable requirement, except that this facility shall not be subject to the provisions of 20.2.7 NMAC (Excess Emissions during Malfunction, Startup, Shutdown, or Scheduled Maintenance) for terms and conditions issued under 20.2.70 NMAC.

7.0 PERMIT REOPENING AND REVOCATION

- 7.1 This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when 8.1.3 or 8.1.4 occurs. Conditions of 8.1 are pursuant to 20.2.70.405.A.1 NMAC.
- 7.1.1 Additional requirements under the federal Act become applicable to this source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
- 7.1.2 Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
- 7.1.3 The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the

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permit.

7.1.4 The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.

7.2 Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. This condition is pursuant to 20.2.70.405.A.2 NMAC.

8.0 RISK MANAGEMENT PLAN

This facility is subject to the requirement for a Risk Management Plan (RMP) under 40CFR68. The owner or operator shall certify annually, as described in Section 6.1 of this permit, that they have developed and implemented a RMP and are in compliance with 40CFR68. This condition is pursuant to 20.2.70.302.A.1 NMAC.

9.0 STRATOSPHERIC OZONE

This condition is pursuant to 20.2.70.302.A.1 NMAC.

- 9.1 The permittee shall comply with the following standards for recycling and emissions reductions pursuant to 40CFR82, Subpart F:
- 9.1.1 Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to subsection 82.156.
- 9.1.2 Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to subsection 82.158.
- 9.1.3 Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to subsection 82.161.

APPEAL PROCEDURES

Any person who participated in this permitting action before the Department and who is adversely affected by the action taken by the Department concerning this permit, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition must be made in writing to the board within thirty (30) days from the date notice is given of the Department's action. This petition must specify the portions of the permitting action to which the petitioner objects and certify that a copy of the petition has been mailed or hand-delivered as required by 20.2.70.403.A.2

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NMAC; a copy of the permitting action for which review is sought must be attached to the petition. Upon receipt of the appeal notice, the petitioner must mail or deliver a copy of the petition to the Department, and to the applicant or permittee if the petitioner is not the applicant/permittee. Requests for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board 1190 St. Francis Drive, Runnels Bldg. P.O. Box 26110 Santa Fe, New Mexico 87502

Unless a timely request for a hearing is made, the decision of the Department will be final. If a timely request for hearing is made, the board will hold a hearing within sixty (60) days of receipt of the petition in accordance with the New Mexico Air Quality Control Act NMSA 1978 § 74-2-7 and 20.2.70.403.A.3 NMAC.

Any person who is adversely affected by an administrative action taken by the board pursuant to 20.2.70.403.A NMAC may appeal to the Court of Appeals in accordance with New Mexico Air Quality Control Act NMSA 1978 § 74-2-9. Petitions for judicial review must be filed no later than thirty (30) days after the administrative action. This condition is pursuant to 20.2.70.403.B NMAC and New Mexico Air Quality Control Act NMSA 1978 § 74-2-9.

SUBMITTAL OF REPORTS AND CERTIFICATIONS

Test protocols, excess emission forms, test reports, compliance certification reports, monitoring results and reports, emissions sampling and measurement data, monitoring activity reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Program Manager, Compliance &Enforcement Section New Mexico Environment Department Air Quality Bureau P.O. Box 26110 Santa Fe, New Mexico 87502-0110

In accordance with 20.2.70.302.E.3 NMAC, Compliance Certifications and Reports shall be submitted to the Administrator at the address below:

Chief, Air Enforcement Section US EPA Region-6, 6EN-AA 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Questions about this permit should be referred to Lawrence Alires of the Air Quality Bureau in

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Santa Fe at (505) 955-8020.

Additional copies of the attachments can be downloaded from the NMED web site at URL http://www.nmenv.state.nm.us/aqb/permit/app_form.html for your convenience.

- **Attachments:** 1) Excess Emission Form (for reporting deviations and emergencies)
 - 2) Compliance Certification Report Form
 - 3) Acronyms

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APPENDIX A

Table A.1: <u>APPLICABLE REQUIREMENTS FOR THIS FACILITY</u>

The permittee shall comply with all applicable sections of the requirements listed in the following table.

Applicable Requirements	Federally Enforceable	Entire Facility	Unit Nos.
20.2.7 NMAC - Excess Emissions during Malfunction Startup, Shutdown and Maintenance	X	(2)	
20.2.11 NMAC Asphalt Processing Equipment	X		819, 820
20.2.61 NMAC Control of Smoke and Visible Emissions	X		External Combustion – 202, 203, 220, 407, 838, 844, 845 Internal Combustion – 502 to 507, 551 to 560, 821 to 824, 826 to 829, 1601
20.2.70 NMAC Operating Permits	X	X	
20.2.71 NMAC Operating Permit Emission Fees	X	X	
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	X	
20.2.77 NMAC New Source Performance Standards Subparts A, I, and OOO	X		Subpart I –819 and 820 Subpart OOO- 816 and 832
20.2.78 NMAC and 40CFR61 Subpart M- NESHAP Asbestos	X	X	
40 CFR 50 National Ambient Air Quality Standards	X	X	
40 CFR 61 Subpart I- NESHAP: Radionuclides from Federal Facilities Not Regulated under Subpart H	X		1300
40 CFR 68 Risk Management Plan	X	X	

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Inhibited Red Fuming Nitric Acid (INFNA) Unsymmetrical Dimethylhydrazine (UDMH)			
40 CFR 80 Regulation of Fuels and Fuel Additives	X	X	
40 CFR 82 Protection of Stratospheric Ozone – CFCs, HCFCs and Halons	X	X	

⁽¹⁾ NMED will petition the EIB to amend the definition of "applicable requirement" in 20.2.70.7.E NMAC to state that the New Mexico Ambient Air Quality Standards (NMAAQS), 20.2.3 NMAC are not included. If the EIB denies the petition, NMED will reopen this permit to add the NMAAQS to this table, and the permittee may challenge a determination that the NMAAQS are "applicable requirements."

⁽²⁾ Regulation 20.2.7 NMAC applies to permit terms and conditions except as provided in Table A.2.

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APPENDIX A

Table A.2: The Department has determined that the following requirements identified in the permit application are not applicable requirements for this facility, or the requirement does not impose any conditions in this permit.

Requirements identified in the Permit Application as applicable	Not Applicable For This Facility (1)	No Requirements (2)
20.2.7 NMAC - Excess Emissions during Malfunction Startup, Shutdown and Maintenance	(3)	
20.2.8 NMAC Emissions Leaving New Mexico		X
20.2.60 NMAC Regulation to Control Open Burning	X	
20.2.64 NMAC and 40 CFR 60 Subpart Cc		X
20.2.65 Smoke Management		X
20.2.72 NMAC Permits		X
20.2.80 NMAC Stack Heights	X	

- (1) No existing or planned operation/activity at this facility triggers the applicability of these requirements.
- (2) Although these regulations may provide guidance, they do not impose any specific requirements on the operation of the facility as described in this permit.
- (3) Regulation 20.2.7 NMAC does not apply to permit terms or conditions arising under 20.2.77 NMAC, 20.2.78 NMAC, or 20.2.82 NMAC, or created solely under the authority of regulation 20.2.70 NMAC.